



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,877

05/12/2005

Armin Schwerdtner

356907.00002-US

6555

78905

7590

01/13/2009

Saul Ewing LLP (Philadelphia)

Attn: Patent Docket Clerk

2 North Second St.

Harrisburg, PA 17101

EXAMINER

CHANG, AUDREY Y

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

01/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,877

Applicant(s)

SCHWERDTNER, ARMIN

Examiner

Audrey Y. Chang

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16, 18-23, 25, 26, 28, 29, 31-48, 51-54, 56, 57, 59 and 61-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16, 18-23, 25, 26, 28, 29, 31-48, 51-54, 56, 57, 59 and 61-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remark

- This Office Action is in response to applicant's amendment filed on November 6, 2008 which has been entered into the file.
- By this amendment, the applicant has amended claims 11, 16, 18, 19, 35, 41, and has canceled claims 24, 27, 30, 49, 50, 55, 58 and 60.
- Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64 remain pending in this application.

Claim Objections

1. Claims 18, and 62-64 are objected to because of the following informalities:

(1). It is not clear what is considered to be the "function of the periodicity interval of the hologram" as recited in claim 18.

(2). It is not clear how does the "hologram-bearing medium controls phase, amplitude or phase and amplitude". Firstly, the phase and amplitude of what? Secondly how does the hologram medium control it? Does this mean the hologram encoded on the medium controls the phase and amplitude or the medium by itself controls the phase and amplitude?

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2872

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. **11/427,629**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim reconstructing three-dimensional scene using light source and hologram encoded in hologram bearing medium with the hologram be Fourier transformed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of **copending Application No. 11/313,989**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claimed hologram that is reconstructed. In various dependent claims they both claimed the same method for encoding into a region of the hologram information solely for a single point of the three dimensional scene.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 2872

5. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. **Patent No. 7,315,408**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim display device for reconstructing hologram. The identical specifics concerning the hologram are explicitly stated in the various dependent claims of both applications.

6. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of **copending Application No. 11/427,645**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim hologram that can be reconstructed to generate three dimensional object scene. The identical specifics are claimed in the various dependent claims of both applications. .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of **copending Application No. 11/427,644**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim hologram that can be reconstructed to generate three dimensional object scene. The identical specifics are claimed in the various dependent claims of both applications. .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. **Claims 11-16, 18-23, 25-26, 28-29, 31-48, 51-54, 56-57, 59 and 61-64** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. **11/937,991**. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim display device for reproducing hologram. .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

9. Applicant's arguments, see the remark, filed on November 6, 2008, with respect to cited reference Payne (US 2004/0263930 A1) have been fully considered and are persuasive. The rejection of pending claims based on the Payne reference has been withdrawn.

10. The double patenting rejections to the claims still stand. The applicant is respectfully reminded that the same invention has been applied in numerous patent applications. The applicant being responsible please consider cancel the applications that claim the same invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (9:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Audrey Y. Chang, Ph.D.
Primary Examiner
Art Unit 2872

A. Chang, Ph.D.
/Audrey Y. Chang/
Primary Examiner, Art Unit 2872